CALIFORNIA WESTERN MEDICINE

VOL. XXIII MAY, 1925 No. 5

SPECIAL ARTICLE

THE BEGINNINGS OF CALIFORNIA'S MEDICAL HISTORY

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E HOPE that Doctor Lyman's story of early medicine in California proves as pleasingly informative and interesting to other physicians as it has to the editors. The painstaking research and study necessary to bring this data together is apparent to any reader. The story is timely and a fitting introduction to this number of California and Western Medicine, devoted largely to incidents in the history of medicine.

Doctor Lyman has prepared a complete bibliography for his article, and will be glad to lend it to any reader who may be interested.—The Editors. HE Medical History of California, owing to the three governments, which at different times have held sway over her, naturally falls into three divisions. History and medicine have progressed side by side, and it is difficult to give a survey of the latter without recording the events that moulded its development. On this account, California Medical History is here described under the following heads:

The Spanish Period, 1769-1822. The Mexican Period, 1822-1848. The American Period, 1848-

THE SPANISH PERIOD, 1769-1822

Baja, or Lower California, having been settled by the Spaniards in the sixteenth century; and missions, to proselyte and educate the Indians, having been founded first by the Jesuits

and, after their expulsion in 1767, by the Franciscans; Galvez, the Royal Spanish Visitador-General, and Fray Junipero Serra, the president of the Franciscan establishments in California, decided, in 1769, to found a mission in Alta California at a place called Monterey, which Vizcaino, the Spanish navigator, had first visited and taken possession of in the name of the King of Spain in 1603. Accordingly, two expeditions, one by land headed by Portola and Fray Junipero Serra, and the other by sea, set out for Monterey, California. The sea forces were transported in two paqueboats, the San Antonio and the San Carlos. It is interesting to note here that the San Carlos, the flagship, also bore the name of the "Golden Fleece," interesting in that the Argonauts, California, and the Golden Fleece became synonymous just eighty years later.

So on January 9, 1769, Galvez, having delivered a stirring farewell oration to the future colonists, and the venerated Padre Junipero Serra having blessed the flags and administered the sacrament, the paqueboat San Carlos, the Mayflower of the Pacific, set sail from La Paz, Mexico, with Monterey as the goal, and San Diego the first rendezvous. There were sixty-two persons aboard that ship, including Commander Vicente Villa and his crew, a Franciscan Friar, Fernando Parron, Pedro Fages, a Lieutenant in the Royal Spanish Army, who later became Governor of California, Constanso, the diarist and engineer, twenty-five Catalan soldiers, a baker, two blacksmiths, a cook, a bleeder and the one who concerns us most, Pedro Prat, the surgeon. Bancroft says that he was a Frenchman, but he was a native of Barcelona, Spain, and a graduate in medicine from the University of Barcelona, where he was a surgeon of note. Holding the rank of Capitan in the Royal Spanish Army, he became the first Surgeon-General in the Royal Presidio of Monterey, and the first resident doctor in California. And so the medical history of California goes back to the cradle of the new Spanish province; the sword, the cross, and the scalpel proceeding hand in hand, and had it not been for the presence of Pedro Prat, it is probable that the projected province would have miscarried and never withstood the travail of its birth.

A few days after leaving La Paz, scurvy, then the scourge of the sea, broke out among the passengers. To add to this dilemma, through leaking casks their supply of water was exhausted, and to replenish they stopped at Cedros Island, where the spring was contaminated and the scurvy-ridden ship was ravaged by dysentery and death stalked in their midst. Later, the ship lost her way in the fog and sailed too far north. During the night of the 110th day from La Paz, she dropped anchor in San Diego Bay. The San Antonio, having sailed almost one month later than the San Carlos, was already there, and at dawn, April 29, the pilot spied the latter ship riding at anchor, but with her deck apparently as spectral as that of the "Ancient Mariner," as not a person was seen moving about. The crew of the San Antonio put off in boats and found that not a man aboard the San Carlos was able to lower one, and the crew, excepting one sailor and one cook, were dead, and many of the soldiers were in a desperate condition from dysentery and scurvy.

Dr. Prat, who had been battling with disease and death almost since his departure, with the help of

the San Antonio crew, constructed a tent-hospital, the first in California, and removed the sick and dying to the shore. But the scourge of the San Carlos was contracted by the crew of the San Antonio, and Dr. Prat, Fray Junipero Serra and two other Franciscan Padres attended, nursed and, buried the victims. Ninety soldiers, sailors, and mechanics succumbed. Only one-third of the original colony intended for Monterey survived. So tragic was this initial baptism of the California shores, that "Punta de los Muertos," or Dead Men's Point, near New Town (San Diego) derived its name from the burial of their scurvy and dysentery-stricken soldiers and sailors—all of which is reminiscent of the first winter of the Plymouth colony on the Massachusetts coast. And so it was Pedro Prat, the first surgeon in California, who nursed the remnants of the Pacific Pilgrims back to life and accompanied them to Monterey, where the second mission was founded and where he became Surgeon-General and resided at the Presidio Real, Monterey having become the capital of California. But he did not long survive. His mind had been so harassed by the harrowing experiences at San Diego that he became demented and was unable to assort and label the large supply of drugs he had brought with him. During the following year he died, and was buried in the Mission at Monterev.

Eventually there were four presidios in California—in the North, San Francisco and Monterey, and in the South, Santa Barbara and San Diego—and the twenty-one missions were divided among them; but because Monterey was the capital of the province, the Surgeon-General remained at the Royal Presidio there, and Monterey became the medical center of the province.

The following is a complete list of the Surgeon-Generals of the Spanish Army who were stationed at the Presidio of Monterey during the Spanish regime:

Pedro Prat, 1769-1771; Pedro Castran, 1773-1774; José Davila, 1774-1783; Pedro Carbajal, 1785-1787; Pablo Soler, 1791-1800; Juan de Dios Morelos, 1800-1802; Manuel Torres, 1802-1803; José Marie Benites, 1803-1807; Manuel Quixano, 1807-1824.

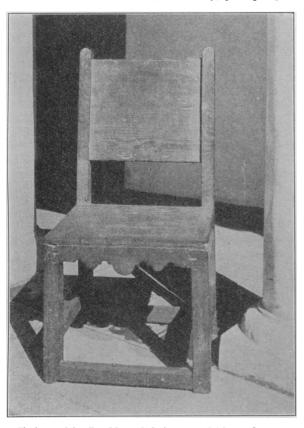
The only surgeon of this time connected with the Mission Dolores was José Davila, a Spaniard. Very little seems to be known of him except that he picked the site as a healthy one for the Mission. He was present with Palou, Lieutenant Moraga, etc., when the cornerstone, not only of the Mission, but of the civilization of San Francisco was laid. And there he buried his first wife, Josefa Carbajal in November, 1780. The doctor did not endear himself to Governor Neve, and as early as 1781 he favored granting the surgeon leave to quit the country, as being incompetent and captious, but in 1783 both men died and were buried in the Mission church.

In 1792, José Antonio Romeu, the fifth Spanish Governor of California, lay dying at Monterey, and history records that it was Dr. Pablo Soler who made the diagnosis and prognosticated a fatal issue. This Dr. Pablo Soler, a native of Barcelona, Spain, and a graduate of the university there, was the most

noted and probably the most skilful of the Spanish-Colonial Surgeons-General in the Californias. He arrived at Monterey as an officer in the Spanish Royal Navy about 1789, and for a while was very contented in this frontier capital, but at length he became weary of his seclusion from learned men of his class. In 1798 he wrote to the King of Spain, complaining of his sad and unhappy fate in being thus confined within the walls of a remote presidio surrounded by Gentiles and comparatively deprived of society, and begged to be relieved. At the same time he gave an account of his services to the California colony; his gratuitous attendance upon officers, missionaries, soldiers, pobladores or settlers and Indians, both Gentile and Christian, when called on; his traveling to remote ranchos, sometimes as far as forty leagues, to visit a sufferer and the difficult operations he had performed. In one case he had saved an Indian who had been gored by a bull so that his entrails protruded and dragged on the ground (and this in a time and region when anesthetics, sepsis, and sterilization were unknown). In numerous cases and during severe attacks he attended those afflicted with scurvy, chronic dysentery, and dropsy. The following entry from the old Spanish archives of the Mission San Carlos has this to say: "Dr. Don Pablo Soler is a great physician and a great surgeon. Had not his humanity prompted him to give his profession to the service of the California colony, he would have been renowned in Spain, but he gave the best years of his life for the welfare of the people, traveling many miles to minister to officers and soldiers, to settlers, rich and poor, to the missionaries, and to the Indians, to all with equal kindness. He was unable to cure Governor Romeu, but his consummate skill was none the less brilliant." About 1800 the King of Spain relieved Dr. Soler, and he was followed in quick succession by Dr. Juan de Dios Morelos, 1801-1802; Dr. Manuel Torres, 1802-1803; Dr. José Marie Benites, 1803-1807.

Although Robert Koch, the great German bacteriologist, did not discover the bacillus tuberculosis until 1882, Spain and Italy were the only countries in the earlier part of that century that believed that the great white plague was contagious and could be imparted one to another. That Dr. Juan Morelos shared this opinion cannot be doubted. In 1800 the Commandant, Hermenegildo Sal, died at Monterey of phthisis, and Bancroft is the authority for what follows: "His disease was in those days considered as contagious and, therefore, at the recommendation of the surgeon (Juan Morelos) all his clothing and bedding were burned, as was the roof of his house after the plastering had been removed from the walls." Again quoting from the same author, we find the following during the medical regime of Quixano: "On one occasion, while Governor Pablo Vicente de Sola ruled the Californias, a wealthy Spaniard died, leaving the whole of his property to the 'fondo piadoso de las Californias'; but, as he had been a consumptive, his furniture and clothing were burned, and in the excitement of the occasion his jewelry and money were lost or stolen. When the case was reported to the Viceroy of Mexico, the president of the College of San Fernando, who had been made administrator of the estate, began suit against the authorities of the then Province of the Californias, from whom he claimed the full value of the property destroyed." These facts speak for themselves and for the Monterey surgeon in a day when neither the bacillus tuberculosis nor its etiological relationship were established.

In the year 1807 there came to Monterey Dr. Manuel Quixano, the last surgeon of the Royal Spanish Army, in which he also held the commission of Capitan. He was a native of Leon, Spain, and a graduate of the Royal Medical University of Madrid. Dr. Quixano first appears in history as a witness when, on August 10, 1809, in the hall of the Mission of San Carlos, Monterey, José Joaquin



Chair used by Dr. Manuel Quixano and his predecessors in the medical offices of the old Royal Spanish Presidio of Monterey, now in the possession of his great-granddaughter, Miss Maria Antonia Field of Monterey.

de Arillaga, the eighth Spanish Governor of California, was required to take the oath of allegiance to Fernando VII, Charles IV having abdicated the Spanish throne. At 5 o'clock in the afternoon, the Governor entered the hall and, in the presence of the Friars, Surgeon Manuel Quixano, and the army representatives, knelt before the crucifix; placed one hand upon the Holy Evangels, and, holding up with the other the cross of his sword, swore to bear true allegiance to King Fernando VII.

To Dr. Quixano belongs the honor of having performed the first recorded autopsy in California. On October 12, 1812, Padre Andres Quintana of the Santa Cruz Mission was found dead in his cell, with the door locked on the inside. He had been ailing for some time, and when found the Holy Oils and

consecrated Host were clasped to his breast. He was buried as found. Two years later, an old Indian neophyte of the Mission lay dying and requested the rites of the Church, and on his deathbed confessed that the good Padre, having been summoned in the dead of night to a dying Indian, had been treacherously murdered under a tree. Later the corpse had been placed in his own bed, and the door of his cell locked on the inside. Dr. Quixano being summoned from Monterey, the poor Padre's body was exhumed from his tomb in the chapel, and an autopsy was performed, disclosing that the Fray had been murdered in a most cruel manner, the details being so revolting that they were withheld from the general records.

Under date of 1815, we find the following entry in the San Carlos records: "Dr. Quixano made a tour of medical inspection of the missions, as serious illness affilicted especially the missionaries and Indians of Southern California. In every mission he was treated with respect due to his rank, but especially due to his ability and benevolence."

Up to this period the trend of California's civilization had been upward, and Monterey may be considered the cradle of this culture, but in 1822 the missions were secularized and in 1823 the rumble of revolution made itself heard. Mexico declared herself independent of Spain and claimed California as hers. A period of decadence was ushered in. Spain withdrew her troops from the Royal Presidios, and Dr. Quixano, with the rest of the Spaniards, retaining their allegiance to the Spanish Crown, resigned. On leaving his offices and those of his predecessors in the Monterey Presidio, the Spanish Government presented him as a souvenir the office chair which had been used at consultations by himself and his predecessors. This chair, the mahogany box which contained his fine medical instruments, and the scales in which he weighed drugs are now in the possession of his great-granddaughter, Maria Antonio Field of Monterey. After relinquishing his Spanish commission, Dr. Quixano retired to private practice among the settlers on the Monterey peninsula. He died in 1825, and his residence and office are now occupied by his descendants.

For seventy-five years and more following the foundation of the Presidio Real at Monterey, the three other presidios, the twenty other missions, and the numerous pueblos were absolutely without skilled medical attendance, and a sick or injured person was dependent upon the missionaries, the "hechiceros" or Indian medicine men, or the stranger within the gates. Occasionally, as we have seen, the surgeon was summoned from Monterey, or the medical officer from some visiting man-of-war or trading-ship was pressed into service. If the stranger within the gates happened to be an American or Englishman and the emergency required it, he was immediately summoned, as "an Anglo-Saxon in those days was synonymous with an M. D."

The Indian medicine men or "hechiceros," in spite of their weird performances, undoubtedly possessed considerable ability. Our pharmacopoeia has been enriched by three valuable vegetable additions discovered and used by the California Indians. Eriodyction Glutinosum, which grows profusely on our

foothills, was used by the medicine men in afflictions of the respiratory tract. So efficacious and so valuable did it prove to the missionaries, that they called it "yerba santa" or holy plant. The second, the rhamnus purshiana, which grows luxuriantly in the timbered mountains of Southern California, was used extensively as a cathartic. So highly esteemed was it by the followers of the Cross, that they christened it "cascara sagrada," or sacred bark. The third, grindelia robusta, was used in pulmonary troubles and as external skin applications following exposure from the rhus toxicodendrom, or poison oak. That these "medicine men" possessed considerable knowledge of anatomy and drugs and their uses is beyond question. Bustamente, in his "History of Mexico," narrates an amusing incident of one of these medicine men or "hechiceros" who was called to the City of Mexico and summoned before the College of Physicians, on the charge of being a quack. In reply to the accusation, he asked his judges to smell a certain herb, which quickly produced a severe nose bleed, and then invited them to check it. Seeing that they were unable to do so, he administered a powder which immediately had the desired effect. "These are my attainments," he exclaimed, "and this is the manner in which I cure the ailments of my patients." So adroit was the fatal Borgia-like decoction which the Indians administered to Father Pujal at San Miguel, that Surgeon Morelos, although summoned there from Monterey, was unable, in spite of an autopsy, to ascertain its nature.

The Padres possessed considerable medical knowledge and were capable of doing minor surgery and even more complicated operations, and they were really the medical Gibraltars in their establishments. Bancroft speaks of one of the Fathers, Marcelino Marquinez of Santa Cruz, as being particularly adept in medical matters. Each mission had its hospital, a single ward supplied with mats instead of beds, and each Padre had his little medical and surgical kit, one of which is still preserved among the treasures in the Mission at San Juan Bautista. A case is on record of one of the Padres amputating the arm of a disabled Indian, and doing it so cleverly that years afterward its success was attested by one of the Friars of San Buenaventura (Bard).

It is interesting to note that the two first Caesarian sections performed in California were accomplished, though unsuccessfully, by Franciscan Friars, one in San Francisco in 1805, the other in San Jose in 1825. The missionaries were required to perform that operation on all women dying undelivered during labor. Perhaps it is not amiss here to add that the first successful Caesarian was performed by that surgical genius, Elias S. Cooper, in San Francisco in 1859, and is a monument, not only to Dr. Cooper's skill, but to man's ingratitude to man, as out of it grew one of the greatest medico-legal battles that ever engaged the California courts. Cooper's name and fame have endured, while the doctors who instigated the suit have been consigned to the oblivion they deserve.

Bleeding was very much in vogue during this period, and many of the soldiers whom the Spanish Government sent to California were enrolled as phlebotomists, their salaries averaging \$450 to \$800

per annum. The lack of capable physicians led to the bleeders being consulted on all manner of cases when the lancet was applied, whether the management of the case required it or not. The great Washington is said to have been the victim of an ill-timed lancet. Bleeding became so abused in this period of our medical history that the barbers added it to their repertoire, and finally became so proficient that Governor Diego de Borica, in 1799, issued a "bando" prohibiting them from exercising that art. It is amusing to note at this period of medical history that the barber and surgeon were very closely allied. The father of Handel, the English composer, was a surgeon-barber, and the military surgeon of the period was often required to shave the regimental officer. There is no historical evidence to prove that our worthy Spanish predecessors were sprung from this school. On the contrary, they were, in several instances, graduates of renowned Spanish medical institutions.

That the Surgeon-General at Monterey was often required to visit distant missions, ranchos, and pueblos is verified by the Spanish records. In 1804, during the time Benites was surgeon at Monterey, he was required by the Mexican Viceroy to visit a number of the missions on account of the alarming mortality. This he did and forwarded an able and exhaustive report of the diseases encountered and their treatment. In 1802 a number of the Padres at the Mission San Miguel sickened and died. They were said to have been poisoned by the Indians. Dr. Morales was hastened to the scene and made the investigation which followed.

THE MEXICAN PERIOD, 1822-1848

As we have seen in the previous chapter, the medical history of California during the Spanish regime was marked by a dearth of doctors, drugs, and diseases. During the fifty odd years consumed in this period, there never was more than one doctor at one time in the whole province. According to Humboldt's estimates, California's population in 1802 was 9000, another estimate in 1822 was about 16,000, and in 1831 some 23,000; so that it was well for the one doctor sponsoring this enormous population that there was a dearth also of disease. The Spanish doctor dealt principally with scurvy, chronic dysentery, and phthisis, although Lues was probably the captain of the men of death, as it was this disease that decimated the Indians; but the Mexican physician had to contend with a totally different category of ailments. With the coming of the "gringo," an array of "winged and wan diseases" followed in his train, chief among which was smallpox, which first manifested itself in 1798. In 1834 it was particularly virulent in Sonoma. Some 12,000 Indians are said to have died there during that outbreak, and so fatal was the type, that it was impossible to dig graves for the dead, and General Vallejo had them interred in trenches, often so shallow that the corpses were barely covered with earth. where they fell an easy prey to the hungry bears and wolves. Dr. Platon Vallejo, the General's surviving son, tells a tragic story of one of the supposedly dead smallpox victims of this epidemic being entombed alive in the trenches before death had claimed him. A hungry grizzly awoke him from his lethal

sleep, and his agonized cries brought help, but not until one leg was partially devoured by the bear.

In 1825 there was an epidemic of measles, and of scarlatina shortly afterward, and in 1834 cholera reared its frightful head.

Monterey continued the capital of the Mexican province, and the following surgeons comprised the medical staff, not only of the Presidio, but of the territory:

I. Evan Perez de Leon, 1829; Manuel de Alva, 1831-1840; Manuel Crespo, 1832; Edward Bale, 1840-1843; Fautino Moro, 1844.

Manuel de Alva was a Mexican surgeon who came to California with the Governor, Figueroa, who introduced printing into California. Although the doctor was somewhat of a politician, he was devoted to his Governor; but in 1835 Figueroa died of apoplexy and, having played a prominent part in the struggle for Mexican independence, he felt that the republic would wish to pay him fitting honors when dead. So, before succumbing, he requested that Dr. Alva would embalm his remains and have them entombed in the vaults of the Mission at Santa Barbara, there to await the honors which a grateful Mexico would bestow upon him in their capital city. This the doctor did, using a great quantity of arsenic. Ten years later they raised the lid of his casket, but nothing remained of the gubernatorial remains. Mexico never sent for the ashes, and Alva blamed the arsenic: "Vanitas Vanitatis." Two years after Figueroa's death, Dr. Alva, with other Mexicans, revolted against Alvarado, for which he was arrested and confined at San Miguel; but escaping, he joined the Carillo faction, only to be arrested again in 1838. He was released on a promise of non-interference in politics. At first he was noted as a freethinker, but at length, because of illness, became devout, and in 1840, obtaining a Mexican passport, he disappeared from the picture.

Manuel Crespo does not appear to have been an authorized surgeon, but a Mexican phlebotomist, and Fautino Moro played a small role for a brief period only as the Mexican "official de salud militar." In 1837, there landed at Monterey a young English surgeon, Edward Turner Bale, probably the first Anglo-Saxon resident physician at Monterey. He was a man of good education, but quarrelsome. Soon after his arrival, he married Maria Ignacia Soberanes, a niece of General Vallejo. The latter appointed him in 1840-1843 surgeon of the California forces, the only Anglo-Saxon who ever occupied that position. Soon after this appointment, he rented a room from the United States Consul, Larkin, with the idea of establishing a drug store. This degenerated into a liquor shop, and the doctor came into collision with the authorities. In 1841, he became a Mexican citizen, and his wife's uncle, General Vallejo, presented him with a large tract of land in the neighborhood of Yount's "Carne Humana Rancho," in the beautiful Napa Valley. There he went on the expiration of his appointment with the California forces. Not long after his arrival at the rancho, Capitan Salvador Vallejo paid his household a visit. Salvador had been long absent at the Indian wars, and his niece, Mrs. Bale. was delighted to see her uncle, and in true California fashion she expressed her pleasure most warmly and affectionately. But the doctor, being extremely jealous of his handsome wife, resented the affectionate greetings bestowed and exchanged, and challenged Capitan Vallejo to a duel. The latter was the most famous swordsman of his day in California, and far outclassed the doctor, whom he whipped as if he wielded a willow stick instead of a sword, which so incensed the doctor that he attempted to shoot his antagonist. This landed him in jail and almost cost him his life. A number of foreigners, notably the Kelseys, attempted to rescue him, which caused great excitement. In 1846, the doctor went into the lumber business, and he died a wealthy man in 1849.

In spite of the Surgeon-Generals being stationed at Monterey, there were many times in their absence from the capital when the settlers or sojourners were dependent upon the visiting medical men aboard men-of-war, whalers, or trading-ships, and it is a tradition in the Field family that they often pressed into service these visiting medicos. William Heath Davis, in his "Sixty Years in California," narrates an occasion of this sort. In 1831 he visited Monterey aboard the bark Louise. While she was lying at anchor in the bay, Davis fell into the main hatch, was rendered unconscious, and fractured his arm. At the time there was no resident surgeon in Monterey, and had it not been for the presence of that distinguished Scotch doctor, as well as botanist, who has left his name forever associated with our noble fir and spruce trees, Davis could not have recounted that delightful reminiscence of Dr. David Douglass, who came to these shores aboard the Dryad from the Columbia River country. Speaking of fractures of the arm and dearth of doctors, it is interesting to recall that the Portuguese navigator, Cabrillo, who first discovered these California shores in 1542, found a nameless grave on San Miguel Island in the Santa Barbara channel, because he had fractured his arm and there was no surgeon aboard to set it properly. It was a Russian physician, as well as naturalist, who came with the Russian exploring ship Rurik in 1816, Otto Von Kotzbue. Commander, who left his identity indelibly and perennially emblazoned on the California hillsides. Dr. Johann F. Eschscholtz gave his name as the botanical cognomen of our famed poppy, which the Spaniards had earlier appropriately hailed as the "Copa de Oro.'

Alfred Robinson, who came to Santa Barbara in 1829, records in his "Life in California" that there were no doctors in that country, and every foreigner was supposed to know something of the practice of medicine. One night, shortly after his arrival, being called upon to prescribe for a woman in great abdominal pain, he suggested a few drops of laudanum, which immediately relieved the sufferer, and established his fame as a medico. To illustrate the point further, he narrates the tale of an absconding American sailor who deserted his whaling ship at a neighboring port and walked to Santa Barbara, where he set himself up as a physician. His efforts were soon crowned with success among the ignorant class, where his pretended remedies wrought marvelous cures. But his medicines could not have withstood the acid tests of the pure food laws, to say

nothing of the prohibition agents, as his nostrums reeked of "aguardiente." Santa Barbara's first physician was probably not a sheep-skin M. D., but an old trapper, a native of Maine, endowed with all the lore of the woods, and the trail, and trained in the emergency school of the frontier. These hunters possessed considerable medical skill. Kit Carson, the hero of a thousand frontier romances, at the age of 18, and equipped with only a razor and a handsaw, successfully amputated, in an amphitheater of the woods, the shattered arm of one of his comrades and seared the blood vessels with a heated iron bar. Bard says "the stump would have reflected credit upon the modern aseptic surgeon. Pegleg Smith, the "El Cojo Smith" of Bancroft, having had his leg mangled by an Indian's bullet, and being alone in the wilderness, sat himself down under a tree, and with a courage born of determination and necessity, ligated his own shattered limb with a buckskin thong taken from his hunting-coat and then courageously amputated the useless member with his hunting-knife. Of this heroic school, Isaac Sparks was a disciple, and he practiced at Santa Barbara from 1833 to 1841.

In 1836, Nicholas Augustus Den arrived in Santa Barbara aboard the Kent. He came from an excellent Irish family, and was a brother of "Don Ricardo." Dr. Nicholas Den had studied medicine at the University of Dublin, although he was not a graduate (Bancroft). On arriving at Santa Barbara, he acquired considerable property and launched his career as a cattleman, which was the pursuit of pastoral California, and in which he amassed a fortune. But the settlers, knowing of his medical training, frequently called upon him and he was obliged to leave his rancho to relieve their ailments and sufferings. He was particularly adept as a phlebotomist. William Streeter was another pioneer medico of Santa Barbara. He had studied in several medical offices in New York, but had never acquired a diploma. He, with Stephan Smith of Peru, is said to have brought the first steam engine to California, which they set up at Bodega.

Probably the first regular M. D. to settle there was Dr. James L. Ord, assistant surgeon of Company F, Third United States Artillery. He arrived in 1847. The first time he did not remain long, but he returned later to spend the greater part of his life. Early in his career, he married one of the handsome daughters of the de la Guerra family. Thus, allied to one of the proud old Spanish-California families, he occupied an unique position in the early annals of California. For his surgery, he had a reputation up and down the California coast, and was frequently called to distant ports, notably to Monterey, to operate. Dr. Ord was a native of Maryland, and through his veins coursed, not only the blue blood of the old South, but the bluest of England, as his father was the romantic offspring of King George IV, and Mrs. Fitzherbert, whom he, as the Prince of Wales, had married in December, 1785. (Memoirs of James Ord.)

Another interesting figure of the 50's was Ramon de la Cuesta. Neither was he an M. D., but he served some time as an interne in a hospital and, although he had no desire to practice medicine, so

successful was he in the treatment of the diseases of children, that he was continually in demand in his neighborhood. He thus becomes the pioneer pediatrician in California.

Dr. James B. Shaw, a graduate of the University of Glasgow, and of the Royal College of Surgeons of London, was a pioneer of 1850, and he became the first president of the Santa Barbara County Medical Society, and one of the distinguished physicians of that community.

Although Los Angeles was founded in 1771, when it had a population of forty-four, it was not until January, 1836, with a population of some 1250 souls, that the first physician appeared, and he proved to be one of the most interesting figures that ever entered California, which Dr. John Marsh did by way of Santa Fe. He was a native of Massachusetts and a Harvard graduate, both in letters and medicine. According to the Archives of Los Angeles, under date of February 18, 1836, one Don Juan Marchet (John Marsh) presented himself before the Avuntamiento or Town Council and declared his intention of locating there and also that he was a physician and surgeon. Permission to practice was granted February 25, 1836, in these words: "The Illustrious Body decided to give him permission to practice medicine, as he has submitted for inspection his diploma, which was found to be correct, and also for the reason that he would be very useful to the community." As his Harvard diplomas were written in Latin, no member of the Illustrious Body of the Ayuntamiento could read them. Neither could anyone else in the Los Angeles of the period designated, so it was necessary to take them to San Gabriel for the mission Padres to translate. There they were found correct, and the doctor was granted a license to practice. So he set up his office and must have had a considerable clientele, as there was no competition. Neither was there any money in the old pueblo, and he had to take his fees in horses, cattle, and hides. This seems to have bothered the doctor considerably, as Bancroft notes his parsimony, and as it was difficult to carry such currency around; so he decided to abandon the pursuits of Aesculapius and take to the pasture and range. This he did in 1837. The same year his name appears upon Larkin's books at Monterey, and shortly afterward he acquired Noriega's Rancho of "Los Madonos," in the shadow of Mount Diablo near the modern town of Antioch. Here he became the pioneer physician of the district and accumulated great wealth in livestock. In 1844 Dr. Pickering, connected with Wilke's United States Exploring Expedition, and an old Harvard classmate of Marsh's, visited him at the rancho and found him living in a little hut, the life of a hermit. The doctor was instrumental in bringing the first immigrants to California. This party included Bidwell, who founded Chico and the State Normal School there. However, these first immigrants do not speak of Marsh in glowing terms. Neither does Bancroft eulogize this pioneer medico; but says he was peculiar, generally disagreeable, and was notorious for his parsimony. Yet he was honest, was possessed of more than ordinary ability, and several of the Californians, notably Vallejo, speak of him in terms of warmest praise. Like many of the pioneers, he espoused a native by whom he had several children. He was murdered in 1856 by a party of young Californians in the neighborhood of Martinez. His rancho is still known as the Marsh grant.

That the barber-surgeon played some part in the early medical history of Los Angeles, is proved by an advertisement that appeared in Commercial street, and is quoted by Newmark: "Gentlemen will be waited on and have shaving, hair-dressing, and shampooing prepared in the most luxurious manner and in the finest style of the art, while cupping, bleeding, and teeth-extracting will also be attended to."

A most interesting figure in the Los Angeles medical world in the days "before the 'gringo' came" was Dr. Richard Somerset Den. The Angelinos, who held him not only with esteem, but with affection, dubbed him "Don Ricardo," and he fits most magnificently into our ideas of the "splendid idle 40's. He was an Irishman of culture and refinement and a medical graduate of the University of Dublin, where he received a thorough training as a physician, surgeon, and obstetrician. After his graduation in 1842, he was appointed surgeon of a passenger ship bound for Australia. On his return he visited his brother Nicholas in Santa Barbara, and resigned his position. He was then 22 years old. In 1843 he was called to Los Angeles to perform several difficult surgical operations. The outcome was so successful that the leading citizens, native and foreign, petitioned him to remain in Los Angeles, and this he did, starting practice there in July, 1844. From that time on until his death in 1895, he devoted himself to his profession there, with the exception of a brief period in 1848, which he spent at the mines, and about twelve years from 1854 to 1866, which he employed in stockraising at his ranch at San Marcos. He served during the Mexican War as chief physician and surgeon of the Mexican forces, and treated, among others, the famous American Consul, Larkin. Newmark says "he was seldom seen except on horseback, in which fashion he visited his patients, and was, all in all, somewhat a man of mystery. He rode a magnificent coal-black charger, and was himself always dressed in black. He wore, too, a black felt hat; and beneath the hat there clustered a mass of wavy hair as white as snow. In addition to all this, his standing collar was so high that he was compelled to hold his head erect; and as if to offset the immaculate linen, he tied around the collar a large black silk scarf. Thus attired and seated on his richly caparisoned horse, Dr. Den appeared always dignified, and even imposing." One of his associates, Dr. Walter Lindley, recalls him as "impressive" and that his magnificent black horse was always groomed to perfection. "Dr. Den himself was invariably well groomed, being at all times dressed as though he were going to a wedding. But he never attended his own, and died at an advanced age a bachelor. He never made a visit for less than \$20." His hobby was horse-racing, and his magnificent steeds were bred for him at Santa Barbara. As a miner in 1848, his luck was indifferent, but as a physician in the mining camps, his skill was so phenomenal that he is said to have received as much as \$1000 in a day for his advice and practice.

Dr. J. T. Griffin was another well-loved physician, not only among the pioneers, but among a later generation. He was chief surgeon of the First Dragoons and came with General Kearney overland to San Diego in 1846, and from there to Los Angeles in January, 1847, where he had charge of the General Hospital. But his medical history there really begins in 1854 and terminated August 23. 1898. He was a brother-in-law of General Albert Sidney Johnston of Civil War fame. He himself was a Virginian and a graduate of the University of Pennsylvania. Lindley says "he carried a brusque and somewhat forbidding mask to cover a tender, generous heart." His fame may be measured by the fact that he was summoned to San Francisco as a consultant on the renowned James King of William case.

Of quite another ilk was William Money, a Scotchman, who arrived in Los Angeles in 1844 "as the servant of a scientific man whose methods and ideas he adopted." (Bancroft.) He practiced for a long time after his arrival, and in 1855 issued the first medical book published in California, "The California Family Medical Instructor," which contained his three physical systems, fifty plates of the human body, and a list of five thousand patients who had been under his care, of whom only four died while under his treatment. It is said that not a copy of the book exists today which happened this way-"not that the book was fatal to the reader; it had very few, but the readers were fatal to the book." They could not throw it away fast enough. But Money was torn between his love of science and his passion for religion, and Cowan records in his bibliography his second book, entitled "Reform of the New Testament Church," by William Money, bishop, deacon, doctor, and defender of the faith of Jesus Christ. This self-constituted doctor and selfanointed bishop died in 1890 at San Gabriel, and left many tomes of California early medical history and his own scientific deductions, all of which were

The first doctor in San Diego was Pedro Prat, who founded the tent-hospital at Dead Man's Point. From then (1769) until the medical officers attached to our army and navy detachments between the years 1844 and 1850, that community was at the mercy of the itinerant traveler of land and sea, the medicine man, the bleeder, and the chemist.

Iames Ohio Pattie, a Kentucky trader, played the role of one of San Diego's greatest medical benefactors. It was in the days (1828) of Echeandia, the Mexican Governor, that Pattie and his father arrived in San Diego. The former threw them both into jail, where the father promptly died, and James Ohio would have shared the same fate had it not been for his knowledge and possession of a medical fact and its means of accomplishment. Smallpox was raging in California. Already many thousands of the Indians and Spaniards had died, and Echeandia trembled in his gubernatorial mansion. In exchange for his freedom, Pattie, who possessed some vaccine, promised to vaccinate him and everyone else in the territory; so he was liberated and began his Herculean task at San Diego with the Governor, the missionaries, and then the garrison and neophytes. From there he worked northward, eventually reaching San Francisco and the Russian colony at Bodega. In all, Pattie claims (Personal Narrative) that he vaccinated 22,000 persons. For vaccinating the Bodega colony, the Russians gave him \$100. For his great service to the Territory of California, Padre Juan Cabot, probably in the name of the Governor, offered him 500 cattle and 500 mules with land on which to pasture the same, providing he would embrace Catholicism and become a Mexican citizen, both of which propositions he refused. But to him, undoubtedly, belongs the honor of having vaccinated at any one time more people than any other one man, doctor or otherwise, before or since in California history.

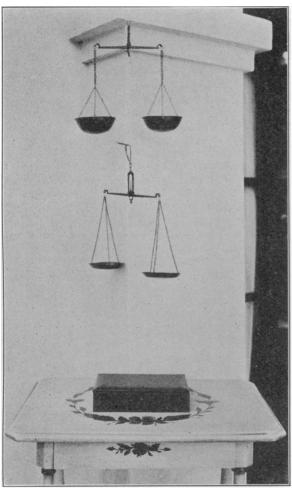
One of the earliest San Diego practitioners was Dr. George McKinstry Jr., a Virginian, who practiced there for over twenty years. Before he settled there, he had an adventurous career, being the first sheriff of the northern district at Sutter's Fort, and was a hero of the Donner party rescue, for whom, on account of his medical knowledge, he was able to apply relief measures, but he was never able to settle down to the general routine and grind of a practitioner. There were many days when he answered the call and disappeared for a long time among the Indians.

Other pioneers were Minder, Burr, C. Hoffman, and Robert H. Gregg. Dr. Wozen Craft, who had been a member of the first convention at Monterey, was also the first physician to locate in San Bernardino, and Dr. Cepbas L. Bard, the first graduate physician to locate at Ventura, although he had several worthy predecessors among the early pioneers who possessed some knowledge of medicine, but no degree thereof, notably Dr. Pali, a Castillian, Dr. Ishbell, and Don José Cruaz, a man of ability who gave his services gratuitously.

In the North, although the Mission Dolores and the Presidio date from 1776, the medical history of the peninsula did not begin until the naming of the cove which extended between Clark's Point in the northwest to Rincon Point in the southeast-Yerba Buena. It derived this name from the plant, a species of micromeria which grew luxuriantly on the hillsides flanking the cove. Yerba Buena was a great favorite among the Indians, who had proved its medical worth as a febrifuge, emmenagogue, carminative and anthelmintic, and early Spaniards added it to their pharmacopoeia. Up to 1835, only vessels came to anchor in the cove, but during that year Captain W. A. Richardson was appointed the first harbor master and he built the first house the same year at Yerba Buena. Two years later Jacob P. Leese built the second house and the first store in the village. On the first of April, 1837, he married General Vallejo's sister, and the year following Rosalie Leese, the first child born in Yerba Buena, arrived on the scene. But there is no evidence that an M. D. presided at the momentous occasion, and it is probable that a partera or midwife, or a partero or man midwife, a functionary peculiar to the native Californians, did the honors. In 1836 Nathan Spear, a native of Boston, where he had been in the drug business, formed a partnership with Leese in the store which the latter had already founded. And although the village grew but slowly, when any of the settlers for miles around were ill, Spear was pressed into service on account of his superior knowledge regarding drugs. In 1844 there were only half a dozen houses, and a population not exceeding fifty persons at Yerba Buena. In 1846 the population numbered 200; in 1847, there were seventy-nine buildings and a population of 459, and out of this number, according to the "Annals of San Francisco," three were doctors: Dr. John Townsend, Dr. Victor Fourgeaud, and Dr. E. P. Jones.

That Dr. John Marsh was in Yerba Buena in March, 1837, is proved by a letter in his handwriting from there, and still in existence (Kress), but the first resident graduate doctor was Dr. John Townsend. He was a Virginian by birth, and with his wife, and brother-in-law, Moses Schallenberger, crossed the plains in 1844, being members of the Elisha Steven's party, which was the second to make the overland journey from Missouri and the first to cross the Sierras by way of the Truckee River, which subsequently became the railroad route. Townsend's ultimate idea in coming to California was to practice medicine, but as a side issue; he and Schallenberger, when they left Missouri in May, 1844, carried a big consignment of silks and satins in their covered wagon which they intended to sell to the Spanish ladies on reaching California. But it was winter before the party reached the Sierras and the first snows were falling. This filled the pseudomerchants with dismay, as they feared their supply of silks and satins would be water-soaked. Before they reached the summit, their horses and oxen were floundering in the snowdrifts, and it was evident to the doctor that his stock would be ruined long before he reached the Sacramento and Sutter's Fort, unless he could make some provision in the Sierras to house it until spring. So he and Schallenberger constructed a log house and made it as water-tight as possible, and stored the precious satins away until the spring and summer suns would make their transportation possible. Schallenberger remained behind to guard the goods while Dr. Townsend and his wife pushed on through the drifting snow to Sutter's Fort. Although Schallenberger's experiences that winter, alone in the bleak fastness of the Sierras, do not concern us here, suffice it to say that the story of that winter is one of the great epics of the mountains.

On reaching California, Townsend embarked on an adventurous career, serving as Sutter's aid and surgeon in the Micheltorena campaign. In 1845 he was practicing medicine for a short period at Monterey, and in 1846 he built his residence, with office combined, on his fifty-vara lot on the south side of California street, between Montgomery and Sansome streets, where the Merchants' Exchange stood for many years. Here he hung out the first medical shingle posted in Yerba Buena, and here it may be said was rocked the cradle of medical San Francisco. Townsend took a prominent part in public affairs and, being a man of education himself, he was instrumental in founding the first school which was erected on the west side of the Plaza (Portsmouth Square) in April, 1848, and of which he, Dr. Victor J. Fourgeaud, C. L. Ross, J. R. Serrini, and William Heath Davis became trustees. He also laid out as a suburban town the Potrero Nuevo on the beautiful sloping banks of Mission Bay, but owing to the distance from town, it was a long time before there was a demand for lots. In 1848 he was elected Alcalde, or Mayor, of the growing city, the name of which about this time was changed to San Francisco. It was also in this year that the doctor went to the mines, but finding that life not to his liking he returned to his practice in San Francisco. Later, in 1849, he bought a ranch near San Jose, and while he and his wife were enjoying their little holding, the cholera epidemic, which had first manifested it-



Scales used for weighing drugs, and the case for fine ear and nose instruments used by Dr. Manuel Quixano, now in the possession of his great-granddaughter, Miss Maria Antonia Field of Monterey.

self in the harbor, galloped down the beautiful Santa Clara Valley, and although the doctor did everything within his power to treat his neighbors and stay the wild havoc wrought in its track, both he and his wife fell victims to the scourge. And so ended the career of the first adventurous Aesculapian of San Francisco. Bancroft says he was a man of excellent character and of genial enthusiastic temperament. In the Clyman Diary, he is described as "much attached to his own opinions, as likewise to the climate and country of California. His pleasant wife does not enter into all her husband's chimerical speculations."

The second graduate physician and surgeon to arrive in San Francisco was Dr. Victor Jean Four-

geaud, who was born in Charleston, South Carolina, April 8, 1817, and was a graduate of the Charleston Medical College. After receiving his degree there, he supplemented his training by matriculating at the University of France, where he spent about four years doing post-graduate work, and was subsequently granted a degree. Being endowed with considerable literary ability, he commenced, while in France, a history of medicine. This subject engrossed him during the rest of his life, but I can find no record of its publication. On his return to this country, he settled in St. Louis, Missouri, which was then the pioneer land of enterprise. Here he started his professional career and his efforts were crowned with success and distinction, and he became there the leading medical man of the period. Among other achievements, he founded the St. Louis Medical and Surgical Journal and became its editor, but having acquired fame and distinction so early in his career. he began, like Alexander, to long for other fields to conquer. St. Louis, at this period in the early 40's, was the frontier station of the far West and the resort of the agents and employes of the great Astor "American Fur Company." The narrative of these trappers, traders, and factors inspired his romantic and adventurous disposition with the grandeur and resources of the Pacific side of the continent. At length he could no longer endure the humdrum existence of a frontier Missouri practitioner. He had climbed to the topmost rung of the St. Louis medical ladder of that day, and having reached the top and looking ahead he saw the years stretching away in an unendurable array, but beyond the horizon there was the Pacific, there was adventure! This fired his imagination; so he climbed down the ladder he had so painstakingly erected, rung by rung, and an April night in 1847 after a first day's march, found the doctor, his wife and their little son encamped alone twenty miles from St. Louis. Six months later, October 21, 1847, we find him again, encamping this time on the banks of the Sacramento River near Sutter's Fort at a point now known as the foot of J street (Sacramento). General Sutter, with the hospitality that always distinguished him, proffered the doctor the hospitality of his fort, but the latter preferred his nomad tent. Eleven days later we find him installed at Yerba Buena, on the Bay of San Francisco, predicting it would be the great metropolis of the Western coast. Here, and in Sacramento later, he made rapid strides to fame and fortune, in both cities occupying a foremost place in the medical world and becoming editor of the pioneer San Francisco Medical Journal. The gold discovery drew him to the mines, and in Sacramento he remained until 1863, when he returned to San Francisco, where he practiced until his death in January, 1875. He was universally mourned as honorable, noble and brave, and his laudatory obituary notices affirm that from "the responsibilities of his calling he never shrank, its exposures he never feared." According to Bancroft, his offices in San Francisco in 1847-1848 were in block 20, bounded by Kearny, Clay, and Sacramento. As we have seen, he was one of the founders of the first school in San Francisco, and he made the first assay of the gold found by Marshall at Sutter's Mill (Eldredge).

To stimulate immigration, which had lagged on account of the Mexican War, he was engaged late in 1847 to write a long article on California and the advantages it offered in its climate and soil to the husbandman, stock-raiser and artisan. This he did. entitling the same "The Prospects of California," setting forth its prospects and resources. This was printed in six columns of an extra number of the California Star bearing the date of April 1, 1848. The same date a courier was dispatched with two thousand copies overland on a contract to reach Missouri in sixty days and spread the document (Hittell). The paper of April 1 mentioned the rumored gold discovery and treated it as of no importance, but on June 14 the same California Star was compelled to suspend, as all its employes, even down to the printer's devil, had struck work and gone off to the diggings, and with this throng headed toward the auriferous hills went Fourgeaud and Townsend.

Although the Annals specifically mention three doctors as residents of San Francisco in June, 1847, exclusive of those connected with Stevenson's Regiment of New York Volunteers stationed here at the time (one of whom William C. Parker practiced in San Francisco up to 1876), I have had great difficulty in distinguishing the third medico and have finally discovered him in the person of Dr. Elbert P. Jones, the editor of the California Star, the first newspaper published in San Francisco. Dr. Jones, if his title denotes medicine, was a capable jack of all trades. The educated man of this generation was not a specialist in one line of endeavor. He could do many things well; for instance, Thomas Jefferson is said to have been the master of eight professions. Bancroft says he was a man of much talent and versatility. A native of Kentucky, he practiced law in San Francisco, was the first editor of the Star, kept the Portsmouth House, was a member and secretary of the Town Council, took an active part in political wrangles and became the owner of many city lots, and gave his name to Jones street. The doctor was a most eccentric character. He wore a long velvet-lined voluminous cloak with the air of a Spanish grandee, and it was said he had acquired more nuggets and gold-dust than any other man in California. And this gold became the grand passion of his life, and one of his greatest pleasures was to spread sheets upon the floor of his bedroom and to pour his gold-dust upon them. Then pushing his naked feet through the dust, he would take it up in great handfulls and shower it upon his head and shoulders and then role and wallow in the glittering metal, thus partaking of the enamored Danae and her illustrious paramour, Jupiter. Dr. Jones was also a disciple of Bacchus, and once when under the influence disposed of some seventy-one of his choice lots. He died in Charleston in 1851. So ends the Mexican period, an era ushered in by revolution, and out by war. In a few communities were doctors with the traditions of a medical training behind them, but most of the pueblos and villages were dependent upon men who had a smattering of medical knowledge and who were glad to do what they could to alleviate the ills of their fellow-men gratuitously. As Bard expresses it, "everyone was a self-constituted physician and the provincial adage:

'De medico, poeta y loco, Todos tenemos un poco.'

(Of medicine, poetry and insanity, we all possess a little) was the outcome of the times." The medical men of both the Spanish and Mexican periods occupy an unique position in medical history. On account of the lack of roads and the distances to travel in this sparsely populated country, they were dependent upon the broncho and so became expert horsemen. In the Mexican period the majority of the doctors were Anglo-Saxons, and brought in contact with another race they all became expert in the Spanish tongue. Peril and adventure dogged their footsteps. Many of them died violent deaths, and hardly a doctor mentioned here but would fill the role of a hero in one of our modern novels of romance and adventure, but their labors and privations were fully appreciated, and no one stood higher in the esteem of their respective communities than did these pioneer physicians.

THE AMERICAN PERIOD, 1848-

Not only did the Treaty of Guadalupe Hidalgo terminate California's Mexican connection, but it also severed the government medical tie, and the last Surgeon-General of Spanish extraction returned to his home. During both of the preceding periods, Monterey had been the medical center of California as the seat of the Surgeon-General; especially was this true during the Spanish regime, when California could boast but one competent medical advisor at a time, but during the Mexican period, due to the increase in population, such important communities as San Diego, Los Angeles, Santa Barbara, Santa Cruz, and San Francisco began to attract their own medical advisors, as related in the preceding chapter. At the close of the Mexican War, San Francisco, which was just emerging from the village of Yerba Buena, became the maritime rival of Monterey and could boast of three doctors, but Marshall's discovery of gold during the winter of 1848, in the tail race of Sutter's Mill at Coloma, turned the trend of California's development, and she awoke from her pastoral dream to find herself at the vortex of the mining furore. Immediately the whole coast from San Francisco to Los Angeles, from the seashore to the Sierras, "resounded with the sordid cry of gold," and California emptied her male population into the "Diggings." Even the doctors—Bale of Monterey, Richard Den of Los Angeles, McKinstry of San Diego, Townsend and Fourgeaud of San Francisco, flocked to the mines, but not as physicians. They had exchanged the scalpel for the shovel. Not only was California resounding with the cry of gold, but the whole world had heard that report even as it had responded to the momentous shot of Bunker Hill. Bishop Berkeley's prophetic words became fact. If, as it had been said, "every road leads to London," in "the days of '49" the proverb was reversed and every road by land and sea was choked by the Argonauts headed toward California. The San Francisco Bay became a leafless forest, so close were the masts of the deserted sailing vessels packed together. And among these immigrants and emigrants estimated at 100,000 up to January 1, 1850, were hundreds of doctors, all bent on one thing-mining. So to understand just what type of medico swarmed about California's auriferous ravines like bees about a hive, it is necessary to conduct you to the gold mines which clus-

tered about Sacramento, the medical center of the Golden Age. "Dame Shirley," the wife of Dr. Fayette Clappe, a Massachusetts physician and surgeon who came to these shores in 1849 and opened the first medical office at Rich Bar on the Feather River, supplies us with the best medical picture of those stirring days in the mining camps. At first Dr. Clappe was the only doctor on the Bar, but in a few weeks he was one of twenty-nine, although the population did not exceed one thousand. His office was the only one on the river, and was a "beautiful architectural idea embodied in pine shingles and cotton cloth." It was ten feet long; a bench like a divan ran the whole length of the room. A rude nondescript in one corner, on which was ranged the medical library consisting of half a dozen volumes, did duty as a table. Shelves, which looked like sticks snatched hastily from the woodpile and nailed up without the least alteration, contained quite a respectable array of medicines. The white canvas window stared everybody in the face, with the interesting information painted on it in perfect grenadiers of capitals that this was "Dr. ----'s office." The walls were decorated with sundry pictures from Godley's, Graham's and Sartain's magazines, among which fashion-plates with imaginary monsters sporting miraculous waists predominated. One day Dame Shirley visited her husband's office and encountered there a patient, a young Georgian who had not had the opportunity to speak to a woman for two years. So elated was he over the event, that he rushed out and invested in a bottle of champagne which Mrs. Clappe assisted the office force in drinking, acting on Willie's principle of "doing in Turkey as the Turkeys do." This bit of atmosphere is repeated, as nothing could be done in the California of that day "without the sanctifying influence of the spirit," even if it was in a doctor's office.

All the gold seekers were heirs to frightful accidents. The doctors dealt not so much with disease. although typhoid, malaria, erysipelas, and dysentery ran rampant in the mountains, as they did with surgical cases often of a terrible nature. What the mountain mining camps really required was a force of our modern ambulances and emergency surgeons. Great rocks were frequently rolling down the steep mountains and maining the unsuspecting miner working in the river bottoms, or the unwary fell into the numerous pits of the prospectors which honey-combed the canyons. Dame Shirley records that "in the short space of twenty-four days we have had several murders, fearful accidents, bloody deaths, whippings, a hanging, an attempt at suicide, and a fatal duel." The accidents included stab and gun-shot wounds, shattered limbs and thighs, and compound fractures. This type of case taxed the ingenuity of the surgeon to the utmost and he was forced to act quickly and undertake the gravest surgical operations without counsel or time to prepare himself for the duty. Dr. E. S. Cooper, who founded the first medical college in California in 1859, in realizing the emergency equation in California surgical work, offered in the first prospectus of the Medical Department of the Pacific, a course in experimental surgery by vivisection—the class to repeat these experiments under the eye of the Pro-

fessor of Surgery, to school the hand, the nerve and the eye of the pupil in order to prepare himself for the numerous casualties and emergency cases encountered. The first surgical case upon which Dr. Clappe operated at Rich Bar was that of a Massachusett's lad, whose leg had been mangled by falling rock. The poor fellow was horrified at the idea of an amputation in the mountains and lay helpless for about six months in his bed, nursed only by the red-shirted miners. First typhoid assailed him, then erysipelas attacked the shattered limb and reduced it to a mass of disease. His intense sufferings were beyond description. Dr. Clappe felt that nothing but an amputation would save him. The other twenty-eight doctors on the Bar opposed him en masse, arguing that the patient would expire under the knife and it was cruel to subject him to further suffering, but they all agreed he would succumb unless the diseased leg were amputated. So Dr. Clappe decided to operate. Failure meant the loss of his reputation, but he waived all selfish considerations and the result was triumphant; although the patient's existence and Dr. Clappe's reputation hung in the balance for many days. Its successful outcome was no mean accomplishment in a day distinguished for its lack of every surgical appurtenance.

The life of another pioneer medical man in the Diggings, Dr. Edward Willis, is related by John Harwood and illustrates two types of doctors who flocked to the mines. Willis was an English surgeon, a graduate of Edinburgh and London, who settled at Placerville, in the days when that community consisted of "two chapels, six taverns, five stores for groceries and dry goods, a gambling-house and a printing office." All the rest of the dwellings were huts or tents, mostly tents. The doctor established himself under canvas, dividing his tent into two unequal parts with a piece of sail-cloth. The larger of these compartments he used as a dwelling, the smaller he styled grandiloquently the "Surgery," and there he spread out on rough pine shelves and an unplaned table his store of medicaments, surgical instruments and general scientific apparatus, some splints, a great jar of leeches, a microscope, a stethoscope, the implements of dentistry, a few chemical retorts and alembics, and several bottles containing preparations preserved in spirits which the doctor had purchased in San Francisco, and were intended purely for show, as the miners stood in great awe of such matters, and considered no doctor worth his salt who had not something curious wherewith to astonish them. At the entrance to this canvas abode, the doctor erected a blue sign inscribed in gold letters, "Surgery," and below, "Dr. Edward Willis, M. R. C. S., Surgery and Physic in all branches. Sets bones, draws teeth painlessly, bleeds, advice gratis." The surgery became a favorite rendezvous for the miners in tattered jerseys and picturesque black beards, and although they sought but little medical advice, they kept the atmosphere of the place blue with smoke and the earthen floor lubricated with tobacco juice. At the time the Englishman arrived there was one other doctor in Placerville. He was an American—Hullings by name and was said to be a man of learning and ability although a debauche, but it is doubtful whether he ever saw a

regular medical college or possessed a sheepskin. He was tall and bulky, wore a black coat, a Mexican sash round his waist and velvet calzoneros of a bright green. He was generally too drunk to feel a pulse, much less to perform an operation, although the greater part of a practice at the Diggings was of an emergency type and at that surgical. Hullings resented the new doctor's arrival at Placerville, as he considered that location, by preemption, belonged to him. Dr. Cooper speaks of this same spirit manifesting itself in San Francisco at the time of his arrival in 1855. Those who came earlier felt that a previous advent and earlier residence amounted almost to superior caste and precedence, and greeted the new professional men with positive enmity and distrust. Hullings instilled this same feeling in Dr. Willis, finally announcing that the Englishman would have to leave. This he refused to do and the former arrived one day at his "surgery" and requested a sight of the Englishman's diplomas and certificates. Called on thus publicly to show his diplomas, Willis could not refuse, and Hullings had no more than received them than he tore them across the middle and then deluged their owner's face with a jet of tobacco juice. In the duel which followed, Hullings paid this insult with his life, and if they had death certificates in those days it bore the triumphant name of Edward Willis, M. R. C. S., and that was how he obtained his California practice.

James L. Tyson was another doctor of the '49 period who arrived in San Francisco, then a town of "wood and muslin," in May of the pioneer year and proceeded to the "Diggings" where he proposed practicing. He shipped for Sacramento on a sailing vessel. His passage cost him \$25, exclusive of food or stateroom, the passengers being forced to provide their own meals, and for bunks to wrap themselves in their blankets on the deck. Having arrived at Sacramento, it cost him another twenty-three-odd dollars to transport his baggage by oxen to the Dry Diggings on the south fork of the American River. There he set up his office in a tent and indulged in considerable bleeding. Although perfectly well, the miners would insist on its performance, and as the charge was an ounce of gold for each, he would gratify them and sometimes would have two or three bleedings around his tent at once. As the food supply at the mines was limited, the miners were forced to a diet of dried and salted meat. Vegetables and fruit were almost unknown. As a result, scurvy was one of the chief complaints of the mountains and was the underlying cause of most of the existing diseases, consisting of rheumatism, dysentery; and brain fever, intermittent, remittent, and continued fevers, the latter early assuming a typhoid character. As most of the gold-seekers continued to work while ill, Tyson records in his "Diary of a Physician" that he never saw so many broken-down constitutions as during his brief stay in California. He enjoyed a considerable practice at the "Dry Diggings," but was finally induced to build a hospital between the Yuba and Bear rivers on a spur of the Sierras, and there he went with his building material strapped to his saddle, which consisted of 100 yards of cotton duck which he made a special trip to the "Embarcadero" at Sacramento to procure. With the help of his cook and steward, some tall, slender pines

were felled, upon which the duck was stretched, and so the hospital was constructed, but before it was completed a poor fellow lying under the trees begged for admittance. He had been on a prospecting tour. seeking a suitable place in the deep canyon and ravines to dig, when suddenly seized with vertigo and sickness, and was now suffering from "bilioustyphoid." In the evening two others came from a neighboring canyon, suffering from dysentery, and the day following twelve Oregonians bore one of their number six miles on a litter to the hospital. These with several other cases soon filled the tent hospital and kept Tyson busy until the snows drove him back to San Francisco, where he notes: "All who had any tendency to diseases of the chest suffered during their stay in the bay city."

J. Tyrwhitt Brooks was likewise a pioneer doctor of the Bear River country. An Englishman, he came to California during the Mexican War to engage in surgery, hoping to attach himself to the Army of the U.S.A. The gold excitement drew him to the mountains, where he engaged in mining and doctoring, receiving an ounce of gold for every patient seen. Between his shovel and scalpel, he amassed considerable gold-dust and nuggets. The amount becoming so prodigious, he was fearful of carrying it about with him and finally entrusted it to a faithful courier bound for Monterey, where it could be banked. En route the courier was attacked by a famous robber of the mines, who lassoed him while riding and dragged him from the saddle, and while he lay wounded and unconscious, escaped with the doctor's hard-earned wealth-all of which is told most graphically and dramatically in "Four Months Among the Gold-Finders in California.

Sacramento was the center of all this mining activity and a great many of our pioneer doctors first hung out their shingles in that city, although they later drifted to other California points. In May, 1850, there were fifty doctors there; probably more, but that number signed the roster of the Medico-Chirurgical Association, the second medical fraternity founded in the state. Stillman felt it was the first association of its kind in the "Republic," but the one founded in Los Angeles in January of that year antedates it by four months, but I will have more to say of these first medical associations under another heading. Suffice it to say now that three of the medical officers of that pioneer society had been presidents of county societies at home. The vicepresident of the same, Dr. John F. Morse, founded there in 1856 the first medical journal published in California. It is also worthy of note that one of the first hospitals in the state was built in Sacramento in 1850, and also the State Medical Society was founded there in 1856. More of these anon, but this will prove the pre-eminence of Sacramento during the Golden Age as the medical center of Cali-

Dr. J. W. Palmer, who was city physician in 1849, in his book, "The New and the Old," gives the best medical picture of San Francisco of this period. Most of the physicians had their offices in tents. Of drugs, quinine was the panacea for all the ills to which California flesh was heir. Palmer sold his supply at auction for \$64 an ounce. As for rents, \$100 per month for a "dog house" was not exces-

sive. When he landed, the doctor was so poor that he slept on a free sand-hill, where the fleas were so fierce that his health was undermined; but finally he got under way through a lucky "monte game," which enabled him to set up an office where he was soon making \$75 to \$100 a day. Medical fees were enormous—two ounces of gold-dust (\$32) a visit; but this was not excessive in a day when laudanum cost \$1 a drop, quinine \$1 a grain, when boots cost \$40 and blankets \$100 a pair, potatoes \$1 a pound, and \$5 for a haircut.

"Gold! Gold! Gold! Gold!

Bright and yellow, hard and cold,

To the very verge of the churchyard mould
Good or bad a thousandfold."

Of the type of medical man that came to California during this period much may be written. "Time's effacing finger" has erased the records of hundreds, but a few are still traceable in the footprints they left behind them. The majority were the pick of the land, well educated, industrious and respectable. San Francisco is yet reaping a rich medical heritage in the bequests of three of the surgical giants of this period. True, these early physicians and surgeons were carried away by the mining excitement, but it would be difficult to find a redblooded man of this era who had not succumbed to the prodromes of the gold fever. The majority of these medicos in their own communities had been men of professional skill and renown who had left practices of magnitude and homes of ease and comfort to seek new ones here. With Hemans we might ask: "What sought they thus afar?" Why did they exchange the known for the unknown? Gold alone was not the quest of this exodus. Most of these were amassing that at home. Toland had a \$16,000 a year practice long before he exchanged the comforts of Columbia, South Carolina, for the perils of the plains. Henry Gibbon Sr. was a professor in the Philadelphia Medical College with a large clientele behind him years before he crossed the Isthmus. Elias S. Cooper had already climbed the ladder of success, founded the State Medical Society of Illinois, given medical instruction and acquired a reputation as a daring and skilful surgeon, especially in deformities of the extremities and defects of the eye, as well as a competency before he left Peoria in his background. H. M. Gray, Stephen R. Harris, and J. C. Tucker were occupying professional places of assurance and eminence in New York when the star of California first appeared above their horizon. What was it, then, that made them stop, look and listen like the wise men before them? It was adventure, and California was the greatest one of the nineteenth century. Of these pioneer doctors who risked the dangers of the ocean and the perils from savage and famine on the plains, it may be said, with the historian, that only the brave attempted it and only the strong survived, qualities that marked them in some degree as superior to their fellows. Having endured these dangers, it was only the persevering, energetic and shrewd who were able to succeed, and eventually to found the cornerstone of medical education on the Pacific Coast. What they earned from the world by genius and untiring energy, they gave back a thousand-fold in ideals and gifts to humanity. Our great hospitals and medical colleges of the Uni-

versities of Stanford and California, our medical societies, medical magazines, endowed beds, and the Lane lecture courses and medical library are all monuments to these men of heroic mould. Of this timber were Elias S. Cooper, who builded better than he knew. He was the prime originator and ardent promoter of medical education on the Pacific Coast, a graduate of the St. Louis (Missouri) Medical College. During the 50's he had the courage, daring, training and skill to resect parts of three ribs and to remove a foreign body (the breech-pin of a gun) from beneath the heart of one of his patients, to ligate the abdominal aorta, in another the primitive carotid, to open joints, to perform a successful Caesarian, to remove a large fibro-cartilaginous tumor from the uterus; to found the first medical college west of the Rockies; and to organize the California state and county medical societies; another was Hugh Huger Toland, who left a munificent practice at Columbia, South Carolina, to cross the plains, traversing the distance between Independence, Missouri, and San Francisco in seventy-six days, the shortest on record. He lived to found a great medical school—that of the University of California-to endow and bequeath it to the state, to amass a fortune which ran into the millions, to occupy a place in his medical world which few have attained since or before, and to be a benefactor to all the worth-while medical institutions of his time and state. Of such timber were J. D. B. Stillman of New York, who was a founder of the early medical institutions of Sacramento, including the first hospital and medical association, and who has left a rich medical heritage of this epoch in his book, "Seeking the Golden Fleece," and Henry Gibbons Sr., a native of Wilmington, Delaware, where his father was a prominent physician. Both father and son were graduates of the University of Pennsylvania, having received their respective degrees some twenty-seven years apart. At the outbreak of the California gold excitement he was one of the prominent physicians of Philadelphia, but he gave it all up to follow the star of Empire. When he arrived in San Francisco in August, 1850, cholera was raging and he was put in charge of the cholera hospital. From that time on until his death, he was connected with everything worth while medically. and was foremost in every measure and organization tending to the education, welfare, and improvement of the people. To him belongs the honor of having given the first course of medical lectures in California. Now they would correspond to the endowed Lane Medical lectures. He inaugurated this course during the winter of 1850-51. One was given every week for thirteen consecutive weeks. That he was not a member of the first medical society founded in San Francisco, was due to the fact that that organization antedated his arrival by two months; but of its reorganization in 1853, as we shall find, he was the first president; likewise, of the County Medical Society founded in 1856, and of the State Society founded the same year, he became the second president. Of the medical department of the University of the Pacific, he was a co-founder and member of the faculty. When that institution crumbled, he became an initial member of the faculty of the Toland

Medical College, now the Medical Department of the University of California. With the resuscitation of the Pacific Medical College, the ancestor of Cooper Medical, Dr. Gibbons became one of the pillars of this institution. His son, Henry Gibbons Jr., who had received his "Toga Virilis of medical manhood," as Dr. Lane was wont to say, from the Medical Department of the University of the Pacific, devoted a lifetime of medical usefulness as dean to all the forebears of the present Stanford University Medical School.

R. Beverley Cole, graduated at Philadelphia, arriving in San Francisco in 1852 aboard the Cherokee, was one of the most picturesque of the early prominent physicians. At the time of the historic murder of James King of William in 1856, Cole was Surgeon-General on the staff of the Grand Marshal of the Vigilance Committee and, with Dr. Nuttall, one of the two first physicians to reach the wounded man. Subsequently, Drs. Hammond, C. Bertody, H. H. Toland, and H. M. Gray had charge of the case, and Cole withdrew chagrined. As time progressed, the condition of the patient became more and more desperate, and in spite of everything his physicians and a legion of the "faculty, including Dr. J. T. Griffin, U. S. A., who was summoned post-haste from Los Angeles, could do, James King of William died, and the Vigilance Committee, which had been called into being by this crime, strung up James P. Casey, the assassin. (See R. K. Nuttall, San Francisco, Chronicle, June 4, 1856.) In February, 1857, the State Medical Society convened at Sacramento, and Beverley Cole sprang his bombshell by affirming that Mr. King's injury was a flesh wound and "not at all dangerous, and that with ordinary care and judgment there would not have been the slightest danger to the life of the wounded man" (Alta California, March 5, 1857), further stating that "a sponge was left in the wound five days which he did not hesitate to denounce as a case of gross malpractice." It is hardly necessary to state that these words created an uproar among the medical gentlemen present, included being the late Mr. King's four doctors. Out of this murder grew the Edward McGowan trial at Napa, and Beverley Cole and H. H. Toland were arraigned as witnesses on opposing sides. The testimony of both was very bitter (Alta and Bulletin, June 1, 1857), and a great war among them and their professional supporters ensued. But in spite of all that occurred then, it is interesting to note that R. Beverley Cole became, when it was founded, Dean of the Toland Medical College and subsequently of the Medical Department of the University of California. The following jingle apropos of Cole's remarks on James King of William's death, appeared in the daily press of the time:

WHO KILLED COCK ROBIN?

Who killed Cock Robin?
I, says Dr. "Scammon"
With my chloroform and gammon
I killed Cock Robin.

Why was it given
In a smothering dose, by heaven?
I refuse to say
Replied Dr. Gray.

Who put in the sponge?
I, says Dr. "Lunge,"
They did me impunge
So, "bedad," I left in my sponge.

Who found the sponge in the body?
I, says (clever) little Bertody,
I found it in the body.

Who took it out?
I, says plucky Stout,
I took it out.

Who blabbed the whole
I, says Dr. Cole,
It lay on my soul
And I blabbed the whole (Medicus).

When Dr. Cooper founded the Medical Department of the University of the Pacific, he appointed Beverly Cole Professor of Obstetrics and Diseases of Women and Children (note pediatricians, the first in San Francisco), as well as dean of that institution. The State Medical Society convened in February, 1859, and Dr. Cole read a report on "Obstetrics and Diseases of Women in California," and, although the speech was delivered in the days before the radio, it was broadcast all over the United States and reverberated on California's shores; so great was the "tempest in the teapot" caused by his unguarded words. In this paper, he said in part, speaking of the pioneer women of California, removed at the most critical period of their lives from the healthful advice of their mothers, that three out of four of those ladies, both married and single, "who have reached the age of 15" are no better than they should be, and he compared them to a certain woman of Babylon as being the "victims of this dissipation and fashionable life, vielding to the solicitations of the opposite sex and finding themselves in a short time the prey to disease." (Bulletin, January 6, 1859.) Although his report was read before the medical society of the state, when "at least one hundred of the most prominent medical men were present," and was intended for scientific and medical minds only, one of the Albany (New York) papers took it up with reflections upon the morality and chastity of the women of California. Immediately all the California publications flew to the rescue and engaged in a wild denunciation of Cole. Although the doctors present at the original meeting when the paper was delivered heard nothing amiss and then made no comment, they now commenced to vilify Cole as the "Woman Traducer." Even the laity of his city and state were up in arms against him. His practice was in jeopardy, and he was persecuted far and near. Finally the medical society itself took up the cudgels and he was exonerated of any "evil intent to defame the character of the women in the state, although there can be no doubt that the language of the report in question was very loose and improper" (Bulletin, February 14, 1859), the vote of exoneration standing, "ayes" 22; "noes" 8. The feeling must have been very intense, as we note as a result of the vote such prominent physicians as these resigning: A. B. Stout, J. P. Whitney, C. Bertody, T. M. Logan, S. R. Gerry, V. F. Fourgeaud, H. M. Gray, and Sharkey. And so it would appear that these pioneer medical giants who had no fear of the terrors of land or sea were likewise not afraid of one another. Cases are on

record where their tongues being inadequate, they resorted to arms.

Another important medical figure of the 1849 period was Isaac Rowell, a graduate in arts, science and medicine of Dartmouth College. At the time of the gold discovery, he was practicing in Maine. He arrived in San Francisco via the Cape in June of the pioneer year, and started his practice in which he was immediately and ultimately successful. He was one of the staunch preservers of the Commonwealth in those exciting days before the Civil War conflict. For a number of years preceding her admission into the Union as a free or slave state, California's fate hung in the balance, and probably no man of his time in California did more for Lincoln and the rights of man than Dr. Rowell. He gave up his practice temporarily and stumped the state, and this in the pre-train days. He also organized and commanded "the first California Mounted Battalion." Of the original faculty of the Medical Department of the Pacific, Rowell occupied with distinction the chair of chemistry, and for a time that of surgery, too. He was also a supervisor and health

Another prominent medico of these days was Stephen R. Harris, the third Mayor of San Francisco. A graduate of the College of Physicians and Surgeons, Columbia University, New York, and for six consecutive years a New York health commissioner, he came to San Francisco in 1849 via Panama. In those days that disease-infested country, the half-way house to California was congested with crowds seeking cabin room to San Francisco. At one time six thousand were detained there several months and among them Dr. Harris. A frightful dysentery epidemic broke out and there hundreds found their graves. The doctor devoted his time and services to the stricken Argonauts and raised funds from the Masonic and Odd Fellow lodges to alleviate their wants and give the dead a decent burial. At length he reached San Francisco in June, 1849, and founded the first real drug store at the corner of Clay and Montgomery streets. He stocked it with a \$20,000 supply of medical goods, the most extensive establishment in the country. Just as fortune's smile seemed most propitious, along came the great conflagrations of May 4 and June 22, 1850; May 4 and September 17, 1851, to again test the mettle of his soul. He lost all he possessed, having replenished his supplies after each successive fire. In 1851 he became Mayor, but continued to carry on his practice.

Dr. Robert McMillan, a native of South Carolina, a graduate in arts and medicine of the University of Pennsylvania, and a Paris post-graduate, entered the Golden Gate early in 1849, one of the best trained medical men, as well as a ripe scholar, and one of the most profound students that ever sought these shores. It was from his office that H. H. Toland launched his brilliant career.

Another medical man of the '49 period who distinguished himself in his day and generation, both in New York and California, was Henry M. Gray, a graduate of the Geneva Medical College, who came to these shores in December, 1849, aboard the Hope, a bark owned and manned by Gray and ten of his

college mates and associates. Having arrived in San Francisco the doctor visited the mines, only to find that his place in life was among the sick, distressed, and maimed. So he returned to San Francisco, commenced practicing, and devoted his great powers. tender sympathies, and cheerful presence to alleviating suffering and illness. Although possessed of the most considerable clientele in the city, he distinguished himself by the amount of his gratuitous practice, being always ready to assuage the suffering of the poor and wretched. On board ship he found his way to the steerage to attend the helpless and afflicted. On his visit to the Yosemite in 1861, he went far out of his route to prescribe for a wounded hunter dying in his cabin among the lonely Sierras. His helping hands stretched beyond the grave. Even when he lay in the shadow of death, he gave a list of the worthy poor who had long received gratuitous practice at his hands to a professional friend and charged him with their care. In other words he raised charity to a cardinal virtue. He was an eloquent and polished speaker and he delivered the oration at the laying of the cornerstone of the Masonic Temple in San Francisco in June, 1860. The newspapers of the day laud the culture and eloquence of the speaker. He was a founder of the State Medical Society in 1856, and took a prominent part in medical meetings. As we have just observed, he was one of James King's doctors. His associates held him as one of the finest types physically and mentally of medical manhood.

There were many more doctors among the valiants of this period: A. J. Bowie, the silver-tongued orator, the founder of the Pathological Society, lived in a frame house which stood in its own garden on the corner of Stockton and Sutter streets, the lumber for which came around the Horn and its architecture smacked of the Shakespearean period. Bowie made this place a rendezvous for the intellectual element of the city. F. P. Wierzbecki, a Pole, was another of the founders of our medical institutions, he being one of the pillars of the medical societies of the county and state. He first wrote of the "California Fever," a confused type of all fever, including gold and ague, and, although ten thousand found their graves that first memorable year of the winter of '49 and the spring of '50, Wierzbecki did not lose a single case. It is interesting to note that the second edition of the book, one of the very first '49 publications in San Francisco, which he wrote: "California as it is, and as it may be, or a guide to the gold regions" which contains a chapter on "Medical Observations" upon the Californians, is now one of the most prized items in a California collection, being recently listed at \$600 in a book-lover's catalogue. Paper was not plentiful on the coast in those days, and the leaves of several of the copies were cut from wall paper. Washington Ayer was another scholarly man of this period. He lectured all the way across the Pacific, and on landing founded at Vernon, on the Sacramento River, one of the very first hospitals in California which underwent a tragic fate in the floods of that river.

Of a later vintage, but probably the greatest genius of his time, was Levi Cooper Lane, who

reached San Francisco early in the 60's to join his uncle on the staff of the first medical college. Dr. Lane was the recipient of more college degrees than has befallen any other medical man in California. From Union College, Schenectady, New York, A. B., A. M., and LL. D.; Jefferson Medical College, Pennsylvania, M. D.; London, M. R. C. S., and Berlin, Doctor of Medicine, "Summa Cum Honore." If degrees are any criterion of a man's greatness, which they aren't, his would be a worthy measure of his mettle. He was also the master of six languages, including Greek and Latin. In the latter, he composed his naval thesis, having been in the United States Navy before he came to California. He was also the author of an acknowledged surgical work on the head and neck. From the medical point of view his life was an ideal one, useful, and well spent, it being given to but few men to be as great as he was, "to be the means of helping to save human life and to diminish human suffering, to be a great doctor, a great philanthropist, and a great scholar as well as a religious and scientific man." When he died rich in years, St. Peter could worthily have said: "Well done, thou good and faithful servant—well done." He worked his way through college on twenty-five cents a week and lived to bequeath a million dollars to medical education, all of which he earned himself. It is only a few who die realizing their ambitions are satisfied, vet Dr. Lane succumbed in the seventies, having tasted the fruition of his own successful accomplishments, life's work completed and its hopes realized. Early in his manhood he had conceived the idea of fulfilling Dr. Cooper's idea regarding the founding of a medical school and a hospital for San Francisco. Although the latter lived to see his dream in part realized, he died long before it was an accomplished fact. And with his tragic and premature death his idea of a medical school seemingly vanished too, but its power survived in the ambitions of his nephew, Dr. Lane, and the latter toiled early and late to realize those dreams, and at length the time came when they materialized in the medical school which he endowed in the name of his uncle— "The Cooper Medical School"—thus proving that every truly great idea never perishes, but lives on to fulfill the destiny allotted it. Not content with this accomplishment, Dr. Lane founded the annual Lane course of lectures and the hospital and Medical Library which still bear his name, although overshadowed by another, and that is wherein the pathetic part of both Toland's and Lane's great gifts to humanity and to San Francisco lie. The identities of their progenitors are fast disappearing from the institutions which they founded. But perhaps Dr. Lane realized this eventuality, as his prophetic words delivered at the dedication of one of the medical college buildings, November 13, 1890, would seem to indicate: "Human memory has its limitations and we scarcely have a right to chide it for lessening its burden by dropping its distant links in the past; and it is probable that sharing the common fate of all things, the footsteps of coming years will obliterate the individuality of the work of which you are witnesses; yet the work itself will not perish," and in the immortal words of the martyred president, "shall not perish from the earth."
380 Post Street.

THE HISTORICAL COLLECTION OF THE LANE MEDICAL LIBRARY

By Louise Ophuls, Librarian

The splendid service the late Doctor Lane rendered Western Medicine in endowing Lane Medical Library, and the sane development of the nucleus under wise guidance until it now ranks with the best of medical libraries, is attractively sketched by Miss Louise Ophuls in this essay.—The Editors.

THE idea of developing an historical section of THE idea of developing an inocurrent the Lane Medical Library originated with Doctor tor A. Barkan. He had already endowed the section on ophthalmology and oto-laryngology. After bringing this section nearly to completion, so far as modern publications and periodicals are concerned, he began to collect all the historical material that might be available. During his travels in Europe he was able to find quite a few interesting volumes, but it soon became clear to him, especially when he consulted various experts on the History of Medicine, that it was a very difficult matter to restrict the historical part of the collection to one specialty. So, largely through the influence of Professor Sudhoff in Leipzig and Professor Sigerist in Zürich, he became interested in collecting material on the History of Medicine in general. He found that the authorities of Stanford University were quite willing to assist in this work, and he was also able to interest Professor Sudhoff of Leipzig sufficiently in this undertaking to have all further purchases for the historical collection made under his guidance and direction.

The largest part of the present collection was obtained in 1921, when there was an opportunity to purchase the historical library of Professor E. Seidel in Meissen. Professor Seidel had spent his life in collecting books on the History of Medicine. He was especially interested in Arabian medicine and, therefore, his collection contains a great many Turkish, Persian, and Arabian manuscripts. But in addition the rest of the History of Medicine is well represented. It was Professor Seidel's wish that his collection should be kept together and if possible well-housed in connection with some teaching institution. At Doctor Barkan's request, he wrote a short vademecum, explaining and enumerating the volumes in his historical collection. The vademecum has been translated and will be published shortly.

Since the purchase of Professor Seidel's library, many interesting old books have been added to our collection and we have endeavored to purchase all modern books on the History of Medicine, and all publications which would facilitate a study of the available material.

The following may serve to give an idea as to the extent of our collection. It is, of course, impossible to go into detail; only a few of the most important works can be mentioned.

The most unique part of the Seidel collection is without doubt that consisting of the Turkish, Persian, and Arabian manuscripts. The oldest and rarest of these manuscripts is a set of two volumes in three parts of a large compilation on general medicine. This system was written at the end of the thirteenth century and is said to have contained eighty-eight volumes, of which we own volumes 32 and 33. Professor Seidel, in his vademecum, calls these volumes "Unikum," as they are supposed to be